

CULTURAL RESOURCES SURVEY OF THE McBRIDE MINE, CHESTERFIELD COUNTY, SOUTH CAROLINA

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ABSTRACT

This report provides the results of a cultural resources investigation of 73 acres of land, situated in southeastern Chesterfield County. The study was conducted by Dr. Michael Trinkley of Chicora Foundation for Mr. Britt Feldner of the Brigman Company and is intended to assist the Palmetto Brick Company comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The tract is to be used by the Palmetto Brick Company for use as a mine. The survey area is located about 4 miles southeast of the town of Patrick.

This survey was conducted to identify and assess archaeological and historical sites which may be in the project area. The proposed undertaking will require clearing of the tract and mining of the area. These actions have the potential to damage or destroy archaeological sites which may in the project tract. For this study an area of potential effect (APE) 1.0 mile around the proposed site was assumed.

Consultation with the S.C. Department of Archives and History revealed no properties in or near the project area that have been determined eligible for the National Register of Historic Places. A Chesterfield County Survey has been completed by the State Historic Preservation Office which identified 112 sites within the county.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology also failed to identify any sites.

The archaeological survey of the tract incorporated shovel testing at 100-foot intervals along transects placed at 100-foot intervals along the roadway running approximately north-south through the project area. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 326 shovel tests were excavated

along 33 transects.

As a result of these investigations four archaeological sites (38CT255-258) were identified within the survey tract. The topography is sloped with the roadway running along the highest area within the tract making it more likely that sites would have been found along the ridge top.

Site 38CT255 is a late nineteenth to early twentieth century tenant site which still has a standing chimney. This area has been severely disturbed by logging activities, so relatively few artifacts were recovered. It is unlikely that any other significant features will be found which could address significant research questions. As a result, 38CT255 is recommended not eligible for the National Register of Historic Places.

Site 38CT256 is also a late nineteenth and early twentieth century tenant site, but unlike the previous site, contains no standing remains. A very small prehistoric component, consisting only of flakes, is also present at this site. This site has also been heavily damaged by logging activities, resulting in a sparse number of positive subsurface tests. It is unlikely that this site will be able to produce any further information about tenant sites. Site 38CT256 is recommended not eligible for inclusion on the National Register of Historic Places.

Site 38CT257 is a prehistoric lithic scatter. This very sparse site is located only on the surface of a cleared road. Extensive logging in the area makes it unlikely that any features or other diagnostic artifacts will be found. No evidence of the site has been recovered from the shovel tests. Site 38CT257 is recommended not eligible for the National Register of Historic Places.

Site 38CT258 is a late nineteenth to early twentieth century domestic site which is located

about 100 feet north of 38CT255. A small prehistoric component is also present at the site. Extensive logging activities has damaged the site and judging from the amount of melted glass and burnt ceramic, it is likely that the structure burned. It is unlikely that this site will be able to address significant research questions about turn of the century domestic sites. Site 38CT258 is recommended not eligible for inclusion on the National Register of Historic Places.

A survey of public roads within 1.0 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such structures were found.

It is possible that archaeological remains may be encountered in the project area during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Britt Feldner of the Brigman Company. The work was conducted to assist the Palmetto Brick Company comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a 73 acre tract proposed to be used for a mine located in southeastern Chesterfield County (Figure 1). The survey area has sloping topography with a road running along the highest ridge of the tract (Figure 2).

The tract consists of steep ridge side slopes and several dominate ridges. The survey encountered mostly pines and hardwoods, but some open grass areas were also seen within the tract. The surrounding area is still very rural, similar to much of Chesterfield County.

The tract, as previously mentioned, is intended to be used as a mine. This work will require the clearing and excavation of the tract. These activities have the potential to cause extensive damage to any archaeological resources which may be present on the tract.

Construction and subsequent daily operation may also have an impact on historic resources in the project area. Although there are no historic structures on the project tract, the proposed undertaking may detract from the visual integrity of nearby properties, creating what some may consider discordant surroundings. The construction activities may create additional traffic, dust, and noise. The operation of the mine may produce additional long-term affects, including an increase in truck traffic and noise. As a result, an architectural survey was also conducted for the proposed undertaking, using an area of potential effect (APE) of 1.0 mile around the proposed property.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Chesterfield County.

We were requested by Mr. Britt Feldner of the Brigman Company to provide a proposal for the survey on August 12, 2002. This proposal was sent on August 13. Investigations started shortly thereafter.

Initial background investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology by Chicora Foundation. As a result of that work, no sites were identified within the 1.0 mile APE.

In addition, the South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. No sites were found within a mile of the survey. A Chesterfield County Survey had been conducted by the State Historic Preservation Office which identified 112 sites, but no previously identified properties were found in the 1.0 mile APE.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from September 24-27, 2002 by Mr. Tom Covington and Ms. Nicole Southerland. The architectural survey of the project APE was conducted on September 27. Report production was conducted at Chicora's laboratories in Columbia, South Carolina from October 4-8.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

CULTURAL RESOURCES SURVEY OF THE McBRIDE MINE

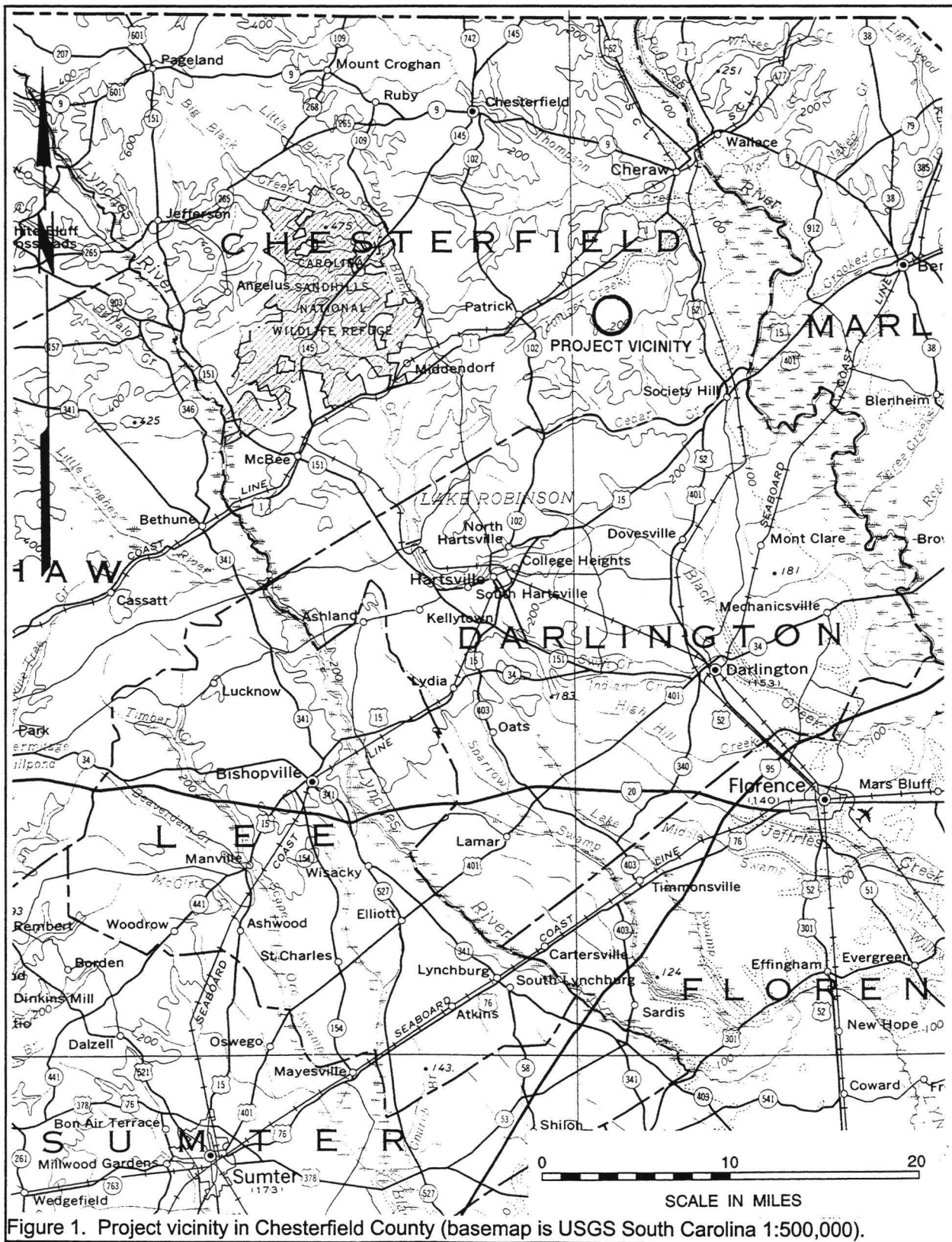


Figure 1. Project vicinity in Chesterfield County (basemap is USGS South Carolina 1:500,000).

INTRODUCTION



Figure 2. Project area (basemap is USGS Cash 7.5').

NATURAL ENVIRONMENT

Physiography

Chesterfield County is situated in the Fall Line and Sand Hills area of South Carolina. It is bounded to the north by Union County, North Carolina, to the east by Marlboro County, South Carolina and the Great Pee Dee River, to the south by Darlington County, South Carolina and to the west by Lancaster and Kershaw counties, South Carolina as well as Lynches River. The western half of the county is drained by Lynches River while the eastern half is drained by the Great Pee Dee. The project area itself is drained by Hills Creek, Brown Creek, and Cattail Branch, all of which both feed into Lynches River.

The Fall Line Sandhills lie in a discontinuous belt 5 to 15 miles wide through the center of the Midlands, paralleling the coast. Fall Line topography is formed by the vigorous erosion of streams that pass from the piedmont bedrock to the loose sands of the coastal plain. The streams rapidly descend to form shoals in major rivers or waterfalls on small streams (Barry 1980:97).

Cooke (1936) has divided the Sandhills into the Aiken Plateau, the Congaree Sand Hills, the Richland Sand Hills, and the High Hills of the Santee. The Richland Red Hills and the High Hills of the Santee are both similar in size and morphology. These two groups are

considered the "Red Sand Hills" while the remaining groups are considered the "White Sand Hills" (Colquhoun 1965).. The project area is located in the Fall Line region, with the Red Sand Hills just east of the area.

Elevations in the county range from about 75 feet above mean sea level (AMSL) at the Pee Dee River to about 725 feet AMSL near the town of Pageland (Morton 1995). The survey tract has elevations ranging from 220 feet AMSL to about 280 feet AMSL. A road runs approximately north-south along the highest elevations along the tract.

Geology and Soils

The soils in Chesterfield County were formed in material weathered from rock and in sediment that was deposited by the ocean, by streams, or successively by both. In general, the underlying rocks are crystalline and metamorphic



Figure 3. Planted pines located throughout the survey tract.



Figure 4. Hardwoods located on the survey tract.

rocks such as Carolina slate, gneiss, schist, and granite. Mills describes the soils as being poor for cultivation. He states:

[a] large proportion of this district presents pine barren sand hills, not worth cultivation, except when intersected by streams; where a little good soil is found. Along the northern boundary the land inclines towards the clayey and stony kind, and present a rolling surface. The river lands are of a rich soil, as also those bordering the creeks, in proportion to their extent (Mills 1972 [1826]:497).

There are five different soil types found on the survey tract. Troup sands are formed in sandy and loamy marine sediments and are excessively drained (Morton 1995). A typical soil profile consists of an Ap horizon of grayish brown (10YR5/2) sand to a depth of 0.5 foot over a light yellowish brown (10YR6/4) sand which can occur to a depth of 2.1 feet. This soil appeared on most of the tract and were on slopes from 0-12%.

Candor sands and Ailey sands also

appear on the steeper slopes of 6-10%. The A horizon of Candor soils consists of a dark grayish brown (10YR4/2) sand to a depth of 0.5 foot over a very pale brown (10YR7/4) sand to a depth of 2.1 feet. Ailey soils have a surface layer of brown (10YR5/3) sand to a depth of 0.2 foot over a light yellowish brown (10YR6/4) sand to a depth of 2.3 feet.

Pelion loamy sands are moderately well drained soils which on the survey tract appear on 2-10% slopes. The A horizon is a brown (10YR5/3) loamy sand to a depth of 0.6 foot over a

very pale brown (10YR7/3) loamy sand to a depth 1.2 feet.

The low areas of the tract consisted of Johnston sandy loam which is frequently flooded and very poorly drained. The surface layer is 2.1 feet thick and is a black (10YR2/1) sandy loam under which a very dark gray (10YR3/1) sandy loam is positioned.

Climate

Elevation, latitude, and distance from the coast work together to affect the climate of South Carolina, including the Fall Line and Sand Hills. In addition, the more westerly mountains block or moderate many of the cold air masses that flow across the state from west to east. Even the very cold air masses which cross the mountains are warmed somewhat by compression before they descend on the Piedmont and adjacent Sand Hills.

Consequently, the climate of Chesterfield County is temperate. The winters are relatively mild and the summers warm and humid. Rainfall in the amount of about 48 inches is adequate, although less than in some neighboring counties. About 27 inches of rain occur during the growing

season, with periods of drought not uncommon during the summer months.

Floristics

In this region, the dominant vegetation is the white oak which is either dominant itself or in combination with loblolly pine. Other overstory trees consist of sweetgum, beech, southern red oak, post oak, mockernut hickory, and southern sugar maple. Understory vegetation is dominated by flowering dogwood, sourgum, redbud, and other smaller species such as holly and leatherwood. Herbaceous flora is generally varied, but includes many species of the xeric woodlands as well as those more prevalent in the piedmont (Barry 1980:138-140).

Currently, the vegetation within the survey area consists of a variety of vegetation, including mixed pine/hardwood forests, planted pines, and open areas of grass. The majority of the survey area is planted pines.

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Research

Very little archaeological research has been performed in Chesterfield County. Most of the work has been performed at the survey level and consists of work associated with highway projects (e.g. Cable and Cantley 1979; Trinkley 1982). Other projects consist of a survey of the Carolina Sandhills National Wildlife Refuge (Wright 1978) as well as a golf course survey at Cheraw State Park (Barker 1990).

Other projects for mines in Chesterfield County consist of one near the current survey tract (Trinkley and Southerland 2002) and one near Pageland, South Carolina (Trinkley and Southerland 2001). Both of these surveys were for the Palmetto Brick Company.

There are additional archaeological investigations in Chesterfield County (see Derting et al. 1991), although these projects are largely confined road and highway widening projects.

Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most

readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I*. Figure 5 offers a generalized view of South Carolina's cultural periods.

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965).

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity.

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this

evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.¹, does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages

offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts — these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark

¹ The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods" (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

PREHISTORIC AND HISTORIC SYNOPSIS

Dates	Period	Sub-Period	Regional Phases		
			COASTAL	MIDDLE SAVANNAH VALLEY	CENTRAL CAROLINA PIEDMONT
1715	HIST.	EARLY	Altamaha		Caraway
1650				Rembert	
1100	MISS.	LATE	Irene / Pee Dee	Hollywood	Dan River
		EARLY	Savannah	Lawton	
	WOODLAND	LATE	St. Catherines / Swift Creek	Savannah	Pee Dee
800		MIDDLE	Wilmington	Sand Tempered Wilmington?	Uwharrie
A.D.			Deptford	Deptford	Yadkin
B.C.					
300		EARLY		Refuge	Badin
1000	ARCHAIC	LATE	Thom's Creek Stallings		
2000			Savannah River Halifax		
3000		MIDDLE	Guilford Morrow Mountain Stanly		
5000	PALEOINDIAN	EARLY	Kirk		
8000			Palmer		
10,000			Hardaway		
			Hardaway - Dalton		
12,000			Cumberland	Clovis	Simpson

Figure 5. Generalized cultural periods for South Carolina.

contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed

Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

In addition to the presence of Savannah River points, the Late Archaic also witnessed the

introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine which reduced the oak-hickory nut masts which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late

as 2,500 B.P. with the introduction of pottery which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.² This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this

² The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historic Research

The early history of Chesterfield County was only briefly presented by Mills (1972 [1826]:496):

This district was originally settled by emigrants from Virginia and Pennsylvania, about the year 1745. At that time it formed a part of Craven county, afterwards of Cheraw precincts; and now constitutes in itself an independent judicial district.

The Cheraw district was originally part of Craven County in 1682. In 1731 the township of Queensboro was laid out at the confluence of the Great Pee Dee and the Little Pee Dee Rivers to entice settlement in that region. However, settlers were slow coming in.

Welsh began settling the area in the late 1730s and other immigrants, including Scots, Irish, Germans, French, and English, soon followed. In addition, settlers from Virginia and Pennsylvania moved into the area. While subsistence based, farmers discovered that cane brakes were perfect for raising livestock. As more land was cleared, other economic sources such as lumber developed. During the colonial period the major crops were wheat, corn, and indigo.

In the 1760s colonists attempted to bring law and order to the area. Colonists complained that they were too far from existing courts and magistrates for them to be of any use. Frustrated by their unheard cries for assistance, they began taking matters into their own hands. These "regulators" allowed only writs and warrants to be served which had been given their consent.

During the American Revolution a number of skirmishes took place in the back country. British Major McArthur was stationed at Cheraw, where a number of encounters took place between he and Colonel Powell of the Continental Army. Unaccustomed to the warm subtropical climate, many of the British fell ill and died. McArthur was forced to withdraw to Lynches Creek, about two miles from Jefferson, to recuperate and received reinforcements. Other than these developments, very little war related activities took place in Chesterfield County (Gregg 1867).

After the war, the Cheraw district grew rapidly and in 1785 the district was divided into

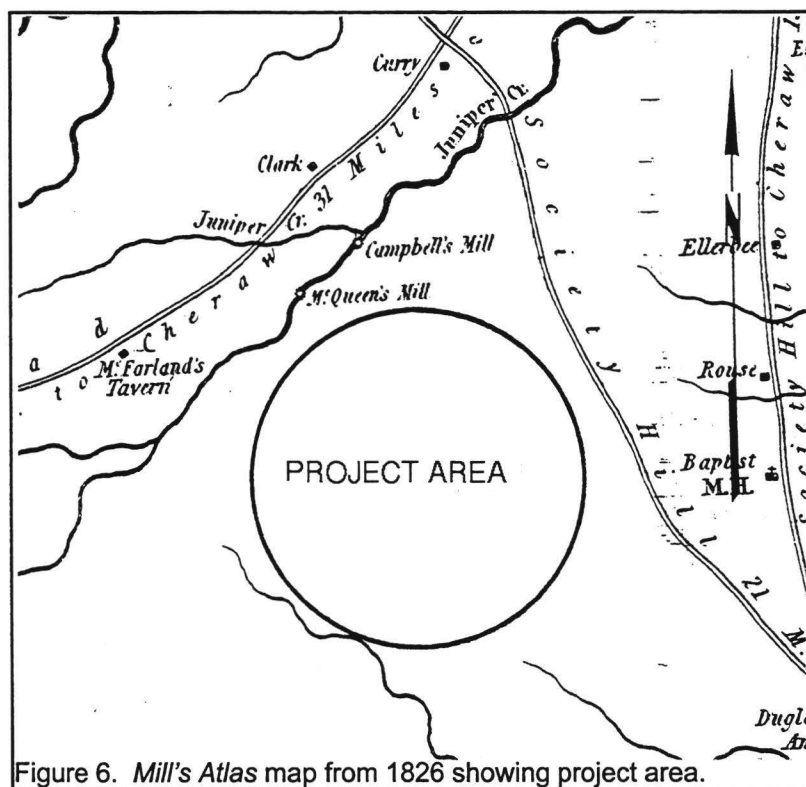


Figure 6. Mill's Atlas map from 1826 showing project area.

three counties: Marlborough, Chesterfield, and Darlington. Improvements were then made in the transportation system creating more roads and public ferries. By 1820 the population of the county consisted of 4,412 white and 2,333 black inhabitants (White 1972).

In 1826 the town of Chesterfield became the county seat. At this time the town consisted of 12 houses, two stores, and a new courthouse. Mills Atlas (1965 [1826]) shows the project area as containing no subscribers at that time. Most of the subscribers shown are situated along major creeks and roads which probably accurately depicts the settlement pattern in the area at that time (Figure 6).

Between 1820 and 1856 South Carolina saw an increase in manufacturing and business. In the late 1820s gold was discovered near Miller's Store (now Jefferson). Although some increases occurred, generally South Carolina remained a state based on subsistence farming and one crop cotton staple (Wallace 1951).

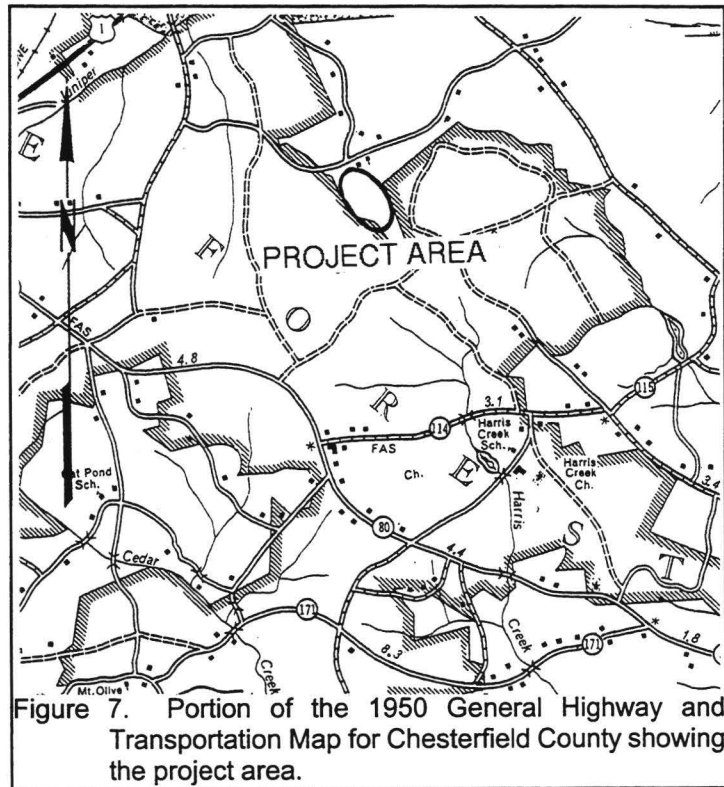
Few Chesterfield County citizens owned slaves, making the residents more like their North Carolina neighbors. Although against secession, the county sent five companies of infantry, as well as supplies, for the Confederate cause. Chesterfield County did not see much action until the last days of the war during Sherman's return from his "March to the Sea". In March of 1865 Union forces reached Chesterfield. After a skirmish with Confederate troops, a number of public buildings were burned.

After Sherman's troops reached Cheraw, they located a large number of Confederate military supplies sent up from Charleston. Sherman inventoried 24 cannons, 2000 muskets, 3600 barrels of gunpowder, and "other things" (Glatthaar 1985). Unfortunately a careless soldier caused many of the supplies to be lost in an explosion that also killed several men and wounded many more.

The arrival of the railroad can be attributed to the eventual recovery of the county. In the 1880s lines were built connecting Chesterfield County to important towns including Salisbury, North Carolina and Camden, South Carolina. During reconstruction and into 1900, small subsistence farming continued. Those larger farmers who had been dependent on slaves turned to sharecropping and tenant farming. The early 1900s brought improvements to the county, although by in large, the area was still impoverished. Cotton was still the staple crop although farmers began experimenting with growing melons, grapes, and other fruits. Chesterfield County shipped 30,000 bales of cotton in 1925 and had become the state's largest peach producer. The South Carolina General Highway and Transportation Map from 1950 shows no houses within the survey area (Figure 7). It may be likely that only the structures along the main roads were recorded at the time the map

was made.

A major shift in agriculture occurred over the next several decades. By 1940 the tractor was widely used. Low cotton yields forced a conversion to soybean production in the 1960s. By the 1970s, poultry and eggs had replaced cotton as the leading income for the county. Today, agriculture remains an important part of the economy, although industry is beginning to offset its importance. Chesterfield has become one of the largest wood pulp producing counties in the state.



RESEARCH METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100 foot intervals along transects placed at 100 foot intervals.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially by transect. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1 foot or until sterile subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered. A total number of 326 shovel tests were excavated along 33 transects.

Should sites (defined by the presence of two or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications. A series of 33 transects were established running primarily north to south along the existing roadway. Individual shovel tests were numbered to the east and west along these transects. The survey area was covered mostly in a planted pine forest, although areas of mixed pines and hardwoods and open grass areas were also encountered. The topography in this area was steep with several distinct ridge tops. The road

was located along the highest portion of the tract.

Sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

Analysis of collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1970) and South (1977). Prehistoric materials were defined by such authors as Yohe (1996), Blanton et al. (1986), and Oliver et al. (1986).

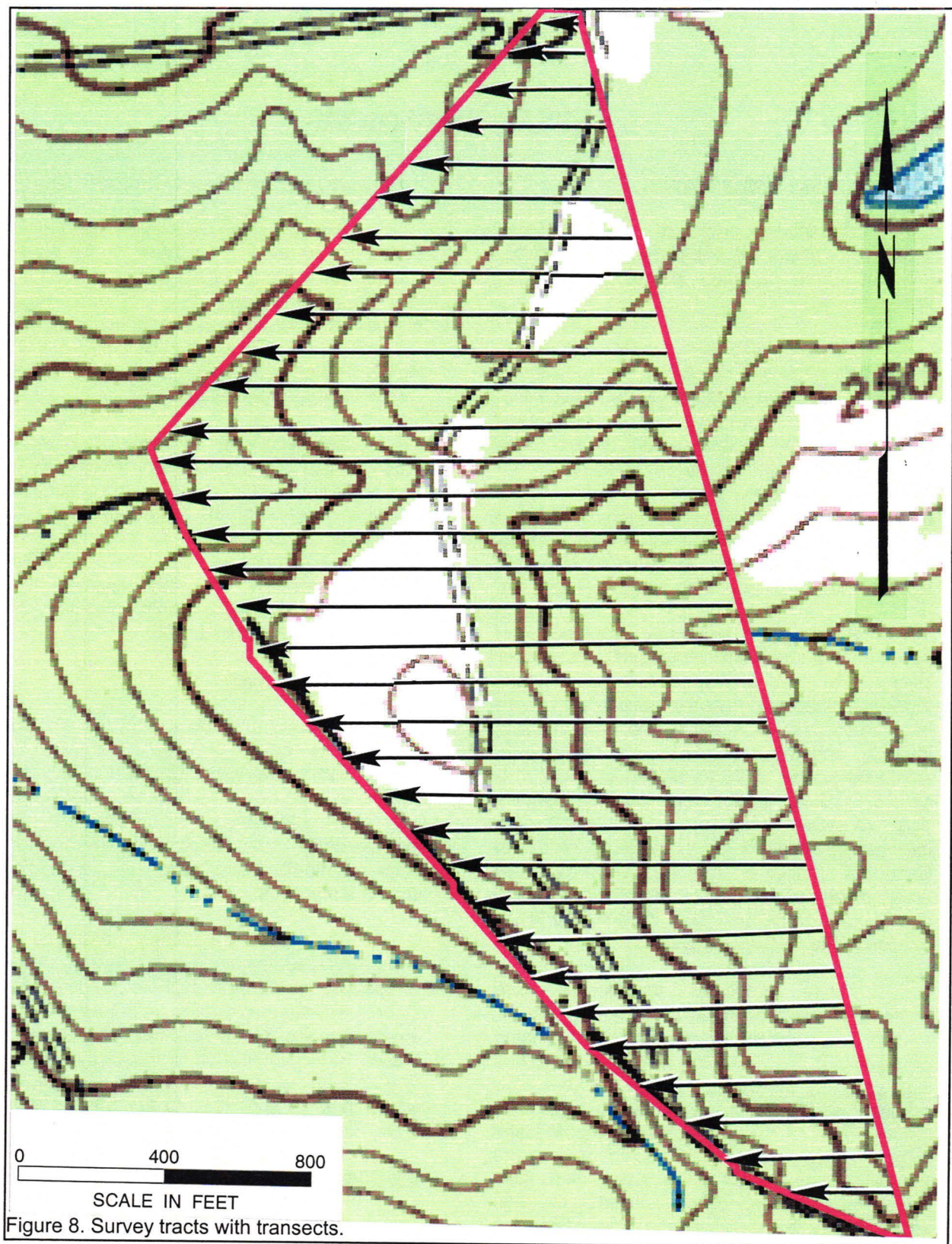
Architectural Survey

As previously discussed, we elected to use a 1.0 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950 and which retained their integrity. Those which have undergone such extensive modifications to preclude their eligibility were not recorded.

For each identified resource an architectural survey form would be completed and at least two representative photographs would be taken. Permanent control numbers would be assigned by the S.C. Department of Archives and History at the conclusion of the study. The site forms for the resources identified during this study would then be submitted to the South Carolina State Historic Preservation Office.

Site Evaluation

Archaeological sites will be evaluated for



further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or

lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on each archaeological site's ability to address significant research topics within the context of its available data sets.

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey four archaeological sites (38CT255-258) were identified. Site 38CT255 is a late nineteenth and early twentieth century tenant site which still has a standing chimney. This area has been severely disturbed by logging activities, so relatively few artifacts were recovered. It is unlikely that any other significant features will be found which would help address significant research questions. As a result, 38CT255 is recommended not eligible for the National Register of Historic Places.

Site 38CT256 is also a late nineteenth to early twentieth century tenant site, but unlike the previous one, contains no architectural remains.

A very small prehistoric component, consisting of non-diagnostic flakes, is also present at this site. This site has also been heavily damaged by logging activities which is evidenced by the sparse number of positive subsurface tests. It is unlikely that this site will be able to produce any further information about tenant sites. Site 38CT256 is recommended not eligible for inclusion on the National Register of Historic Places.

Site 38CT257 is a prehistoric lithic scatter. This very sparse site is located entirely on the surface of a cleared road. Extensive logging in the area makes it unlikely that any features or other diagnostic artifacts will be found. Site 38CT257 is recommended not eligible for the National Register of Historic Places.

Site 38CT258 is a late nineteenth to early twentieth century domestic site which is located about 100 feet north of 38CT255. A small prehistoric component is also present at the site. Extensive logging activities have damaged the site and judging from the amount of melted glass and burnt ceramic, it is likely that the structure burned. It is unlikely that this site will be able to address significant research questions about turn of the century domestic sites. Site 38CT258 is recommended not eligible for inclusion on the National Register of Historic Places.

Archaeological Resources

38CT255

Site 38CT255 consists of a late nineteenth century to early twentieth century tenant site

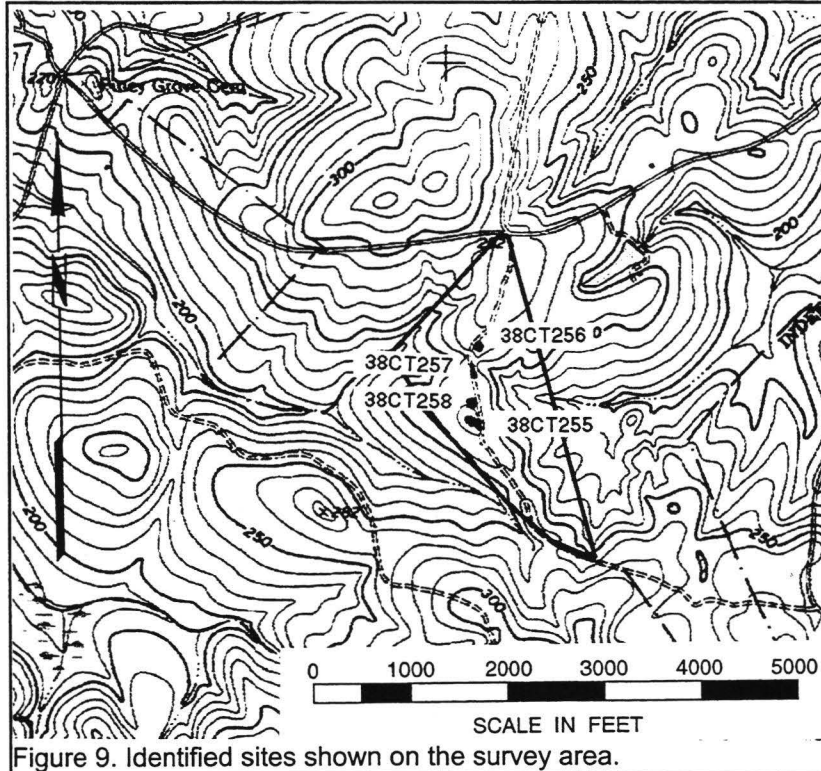
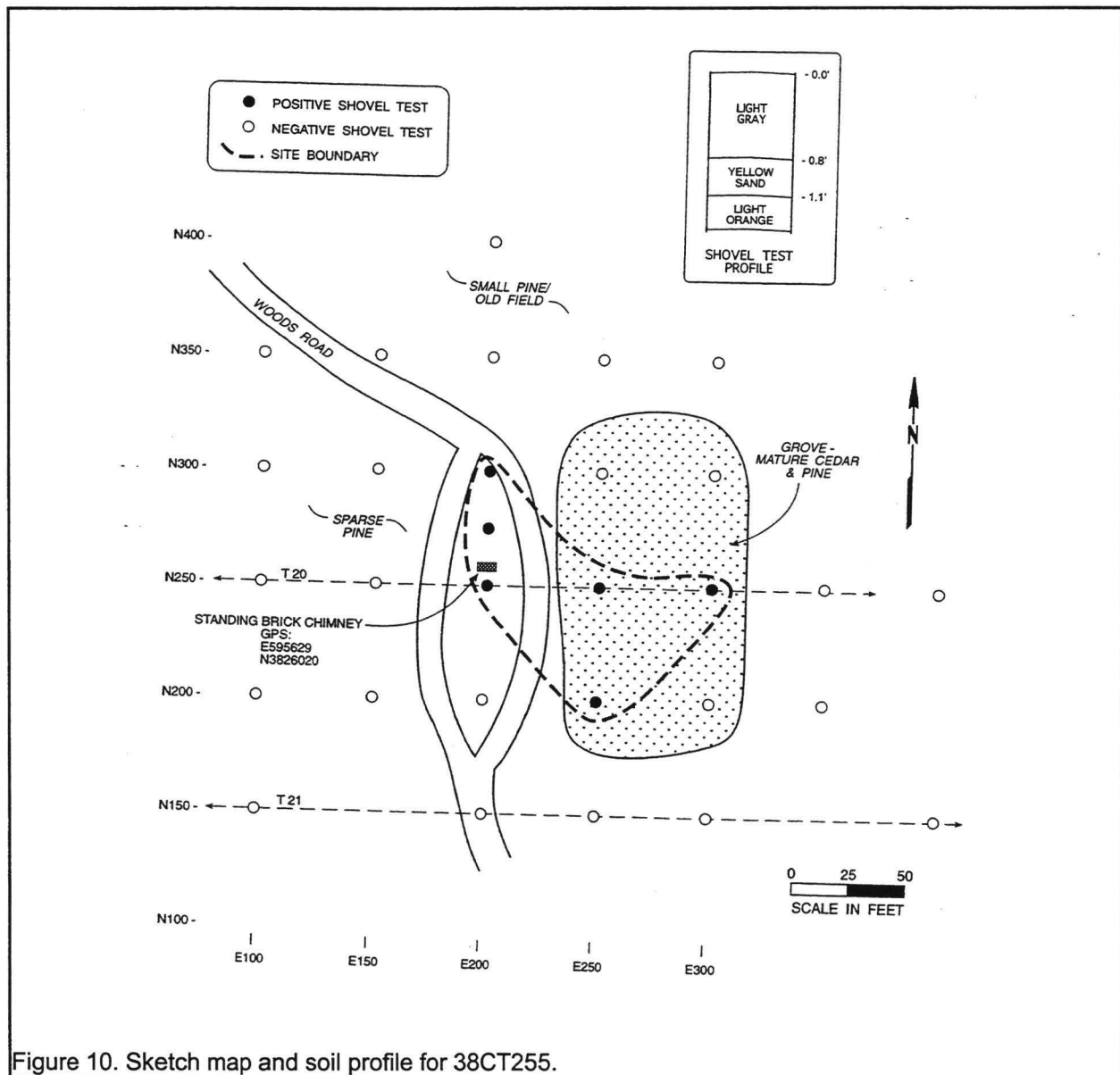


Figure 9. Identified sites shown on the survey area.

CULTURAL RESOURCES SURVEY OF THE McBRIDE MINE



situated on a ridge top at an elevation of about 270 feet AMSL. The topography in the area is steep with slopes running down to the east and west of the site. Vegetation in the area consists of planted pines, but cedar trees are also located around the site.

The site was first encountered when the chimney was noticed still standing. The site was noted, but subsurface testing was not performed until Transect 20, Shovel Test 1 East (N250 E250) was positive at the site. From there, close interval

testing was performed at 50 foot intervals along the cardinal directions until two consecutive negative tests were encountered. Ten additional shovel tests were excavated at the site with six (60%) positive.

As previously mentioned, the artifacts recovered at the site represent a late nineteenth to early twentieth century site. These remains include whiteware, stoneware, and porcelain. The manganese glass found at the site indicates from the last quarter of the nineteenth century until

RESULTS OF SURVEY

World War I (Jones and Sullivan 1985:13). An estimated site area including the positive shovel tests and standing chimney is 100 feet by 100 feet. A central UTM coordinate for the site is E 5 9 5 6 2 7 N 3 8 2 6 0 2 0 (NAD27 datum).

A list of recovered artifacts is provided in Table 1.

Shovel tests produced Ailey soils which have a surface layer of brown (10YR5/3) sand to a depth of 0.2 foot over a light yellowish brown (10YR6/4) sand to a depth of 2.3 feet.

The data sets at this site are minimal. There is some evidence of the original structure including the chimney and about nine large rocks which may have been the foundation, but the area has still been heavily disturbed by logging activities which makes the context of at least the piers uncertain and their integrity questionable. The archaeological remains are limited to primarily kitchen remains, with little evidence of other artifact groups. It is unlikely that this site will be able to provide information concerning the lifeways of nineteenth century tenant farmers.



Figure 11. Chimney standing at 38CT255.

It seems unlikely that the archaeological

Table 1.
Artifacts found at 38CT255

		N200 E250	N250 E200	N250 E250	N250 E300	N275 E200	N300 E200	Total
Kitchen	Porcelain, white	1						1
	Yellowware, undec.	5						5
	Yellowware, annular	1						1
	Stoneware, bristol			1				1
	Whiteware, undec				1	1	1	3
	Glass, clear			1				1
	Glass, manganese				1	3		4
	Glass, melted					1		1
Architecture	UID nail fragment	1						1
	UID iron		1					1
	Window glass			2				2
	Hook, iron			1				1
TOTAL								22

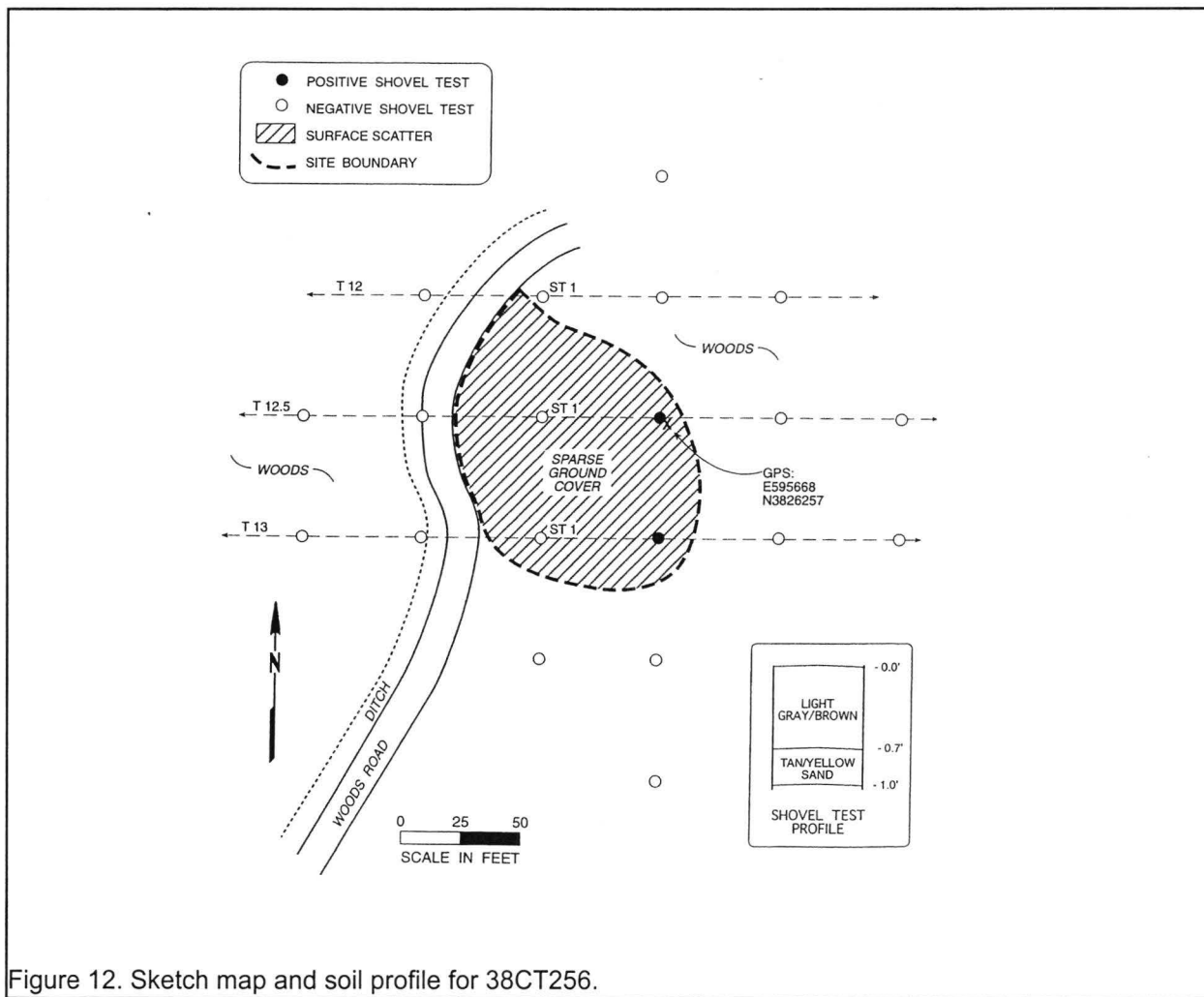


Figure 12. Sketch map and soil profile for 38CT256.

remains (even with remaining features) are capable of addressing significant research questions. Consequently, we recommend the site not eligible for inclusion on the National Register of Historic Places. No additional management activities are recommended pending the review of the State Historic Preservation Office.

38CT256

Site 38CT256 is a late nineteenth to early twentieth century domestic site with a small prehistoric lithic scatter. It is situated on a ridge side slope at an elevation of about 270 feet AMSL. The site is accessible by a road which connects to McBride Road to the north. A central UTM coordinate for the site is E595668 N3826257 (NAD27 datum).

The site was first encountered when Transect 13 ran through the site and several surface artifacts were seen. None of the shovel tests on this transect, however, were positive. Close interval testing was performed at 50-foot intervals along the cardinal directions until two consecutive negative tests were found. Ten shovel tests were excavated around the site area with only two (20%) positive.

The surface tests produced artifacts consistent with a late nineteenth through early twentieth century domestic site. No features were encountered, but brick fragments were found around the site. A few prehistoric flakes were also recovered from the site.

Table 2 lists the recovered artifacts.

RESULTS OF SURVEY

While undecorated whitewares are most common, the site also yielded both stamped and polychrome handpainted examples. Also present was a small quantity of "black" glass. This assemblage, coupled with the absence of manganese or "solarized" glass suggests that this site may be earlier than 38CT255. The prehistoric remains are not diagnostic, although both metavolcanic and quartz materials were recovered.

Shovel tests produced soils resembling Ailey sands which have a surface layer of brown (10YR5/3) sand to a depth of 0.2 foot over a light yellowish brown (10YR6/4) sand to a depth of 2.3 feet.

The National Register potential of 38CT256 is contingent on several factors such as the data sets present, site integrity, and the ability to address significant research questions. This site had few data sets with kitchen remains making up almost all of the samples. No surface or subsurface features were found and due to the severely damaged soils it is unlikely that any intact features will be found.

We do not believe that this site would be able to address significant research questions. Therefore, we recommend the site not eligible for the National Register of Historic Places. No additional management activities are recommended pending the review of the State Historic Preservation Office.

38CT257

Site 38CT257 consists of a surface scatter of prehistoric remains. It is located on a

Table 2.
Artifacts found at 38CT256

	T12.5 ST 1.5	T13 ST 1.5	Surface	Total
Kitchen				
Whiteware, undec.			9	9
Whiteware, stamped			1	1
Whiteware, poly handpaint	1			1
Clouded ware			1	1
Stoneware, brown salt glaze			1	1
Glass, "black"	1		2	3
Glass, brown	2		4	6
Glass, aqua			4	4
Glass, melted		1		1
Kettle fragment			1	1
Slate fragment			1	1
Prehistoric				
Flake, quartz			1	1
Flake, metavolcanic			2	2
Biface fragment, metavolcanic	1			1
TOTAL				33

ridge side slope at an elevation of about 260 feet AMSL. A central UTM coordinate for the site is E595615 N3826175 (NAD27 datum).

Shovel tests were completed at the proposed 100-foot intervals, but none were

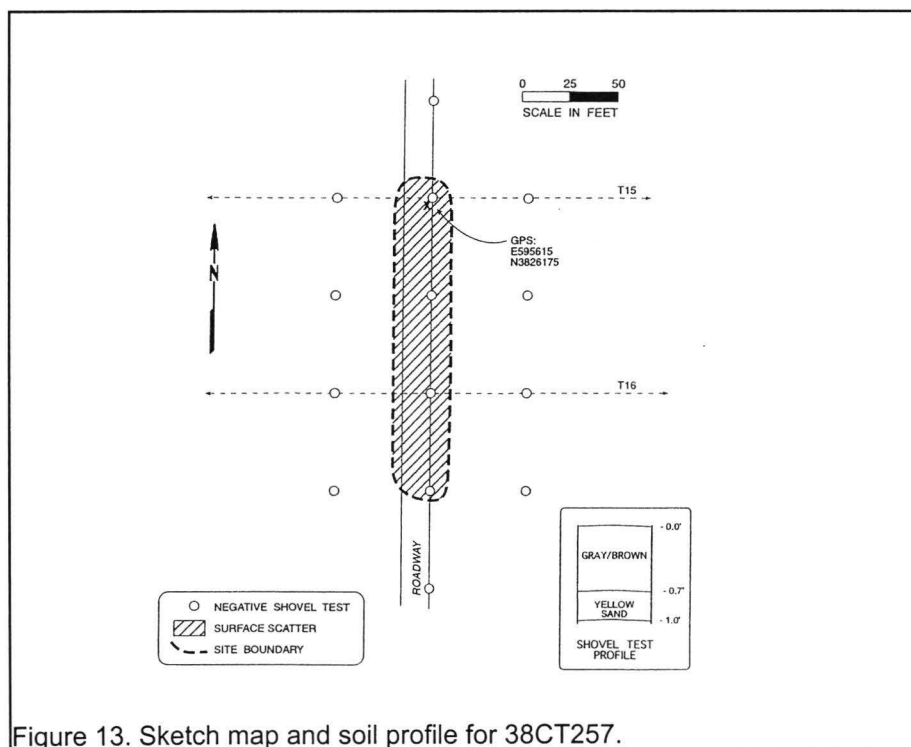


Figure 13. Sketch map and soil profile for 38CT257.



Figure 14. View of 38CT257 on the road.

to produce any diagnostic artifacts which could date the site and the integrity appears to be damaged by the construction of the roadway and other logging activities. Due to the low artifact density, it is unlikely that any more specimens will be found that could address any significant prehistoric research questions. Based on this analysis, this site is recommended not eligible for inclusion on the National Register of Historic Places and no further management activity is recommended pending review by the State Historic Preservation Office.

38CT258

positive. Close interval testing at 50-foot intervals also failed to produce artifacts. A surface survey revealed only ten surface artifacts, all metavolcanic flakes. The estimated site area is 150 feet by 25 feet. The site is located along the road running north-south through the project area.

Shovel tests produced the Ailey series of soils. This series consists of a surface layer of brown (10YR5/3) sand to a depth of 0.2 foot over a light yellowish brown (10YR6/4) sand to a depth of 2.3 feet.

This site failed

Site 38CT258 is a surface and subsurface

Table 3.
Artifacts found at 38CT258

		N250	N200	N200	N200	Surface	Total
		E250	E200	E150	E100		
Kitchen	Porcelain, white					1	1
	Whiteware, undec.					5	5
	Stoneware, Bristol					1	1
	Earthenware, burnt refined					5	5
	Glass, "black"			2		1	3
	Glass, brown					1	1
	Glass, manganese					1	1
	Glass, melted		3			30	33
Architecture	Nail, handwrought				1		1
	Window glass	2				6	8
	UID iron					1	1
	Strips, brass					2	2
Prehistoric	Flake, metavolcanic					1	1
	Raw material, metavolcanic					1	1
TOTAL							64

RESULTS OF SURVEY

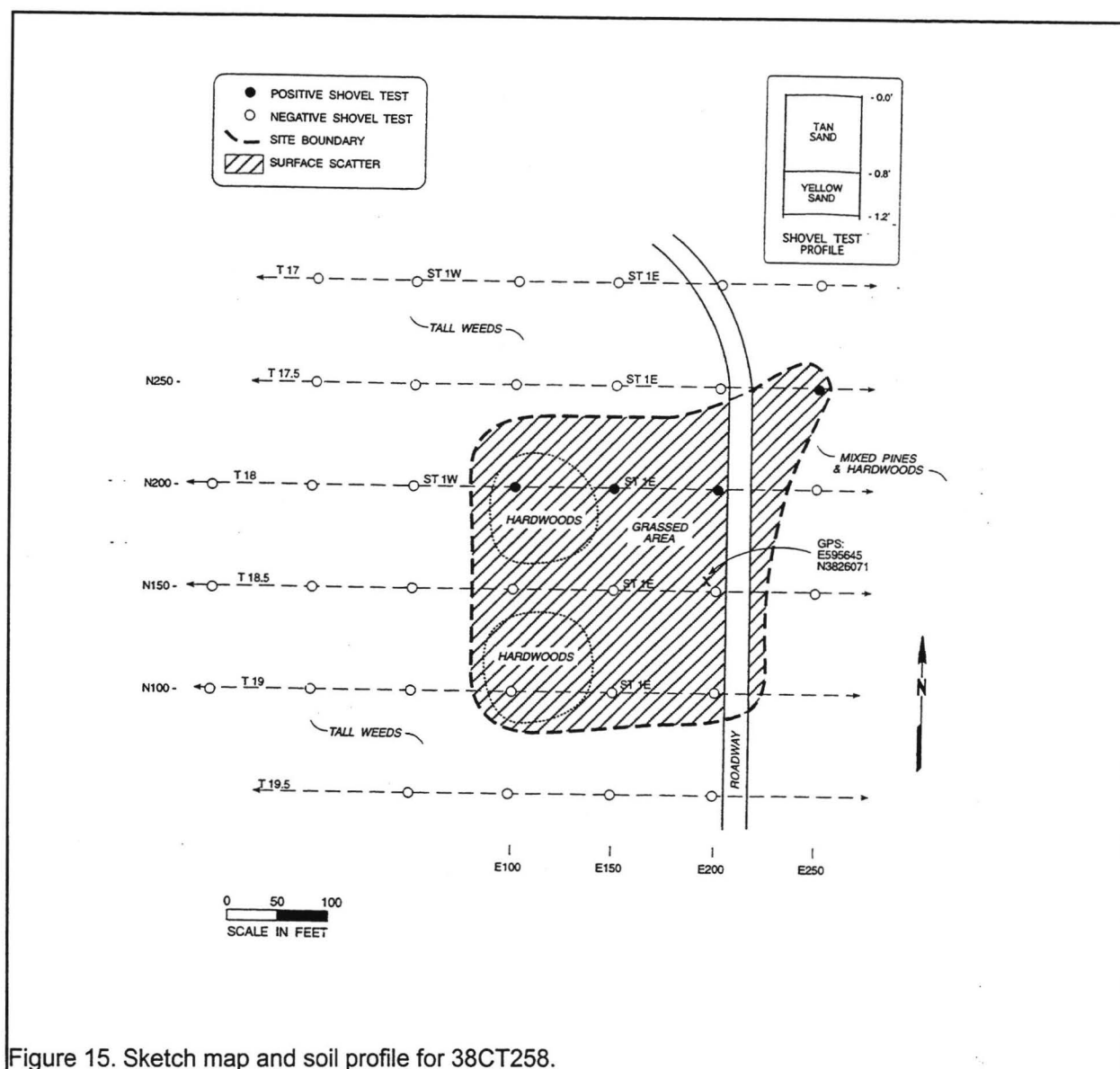


Figure 15. Sketch map and soil profile for 38CT258.

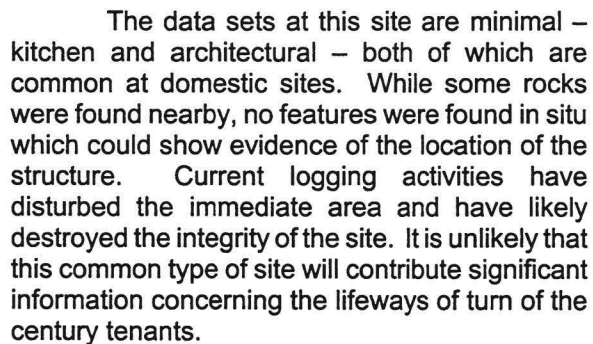
scatter of historic remains and a small scatter of prehistoric lithics located on a ridge side slope at an elevation of about 260 feet AMSL. The central UTM coordinate for the site is E595645 N3826071 (NAD27 datum).

Shovel tests were conducted at the proposed 100-foot intervals with Transects 18 and 19 running through the site. Transect 18, Shovel Test 1 East (N200E150) produced the only positive test on the transect lines. The site, however, was initially discovered by the surface scatter of domestic artifacts. Close interval testing

was conducted at 50-foot intervals along the cardinal directions until two consecutive negative shovel tests were encountered. A total of 11 shovel tests were conducted in the site area with only four tests (36%) positive.

Shovel tests produced soils consistent with Ailey sands which have a surface layer of brown (10YR5/3) sand to a depth of 0.2 foot over a light yellowish brown (10YR6/4) sand to a depth of 2.3 feet.

The artifacts found represented what



few that are still standing are abandoned and dilapidated.

Consequently, we recommend the site not eligible for inclusion on the National Register. No additional management activities are recommended pending the review and concurrence of the State Historic Preservation Office.

Architectural Resources

There are no previously recorded National Register buildings, districts, structures, or objects within the 1.0 mile APE. The 1950 *General Highway and Transportation Map of Chesterfield County* (Figure 16) shows several structures within the APE, but examination of these structures reveal that almost none remain, and the

CONCLUSIONS

This study involved the examination of a 73 acre tract situated in southeastern Chesterfield County, South Carolina. The tract is proposed as a mine for the Palmetto Brick Company. This report, conducted for Mr. Britt Feldner of the Brigman Company, provides the results of that investigation and is intended to assist the Palmetto Brick Company comply with their historic preservation responsibilities.

The survey area consists of areas of mixed pines and hardwoods, planted pines and open areas of grass. The archaeological survey conducted at 100-foot intervals, along with close interval testing at 50 feet, revealed four sites (38CT255-258).

Site 38CT255 is a late nineteenth to early twentieth century tenant site which still has a standing chimney. This area has been severely disturbed by logging activities, so relatively few artifacts were recovered. It is unlikely that any other significant features will be found which could address significant research questions. As a result, 38CT255 is recommended not eligible for the National Register of Historic Places.

Site 38CT256 is also a late nineteenth to early twentieth century tenant site, but unlike the previous one, contains no remaining features. A very small prehistoric component of flakes is also present at this site. This site has also been heavily damaged by logging activities which is also evidenced by the sparse number of positive subsurface tests. It is unlikely that this site will be able to produce any further information about tenant sites. Site 38CT256 is recommended not eligible for inclusion on the National Register of Historic Places.

Site 38CT257 is a prehistoric lithic scatter. This very sparse site is located all on the surface of a cleared road. Extensive logging in the area makes it unlikely that any features or other diagnostic artifacts will be found. Site 38CT257 is

recommended not eligible for the National Register of Historic Places.

Site 38CT258 a late nineteenth to early twentieth century domestic site which is located about 100 feet north of 38CT255. A small prehistoric component is also present at the site. Extensive logging activities have damaged the site and judging from the amount of melted glass and burnt ceramic, it is likely that the structure burned down. It is unlikely that this site will be able to address significant research questions about turn of the century domestic sites. Site 38CT258 is recommended not eligible for inclusion on the National Register of Historic Places.

The surrounding areas are still fairly rural with few structures, inhabited and abandoned, near the project area. Nevertheless, an APE 1.0 mile around the project area was examined, but no historic structures were identified which are intact and which appear to be potentially eligible for inclusion on the National Register of Historic Places.

It is possible that archaeological remains may be encountered in the area during construction. As always, the utility's contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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